

CLAIMS

What is claimed is:

1. A drum-type washing machine, comprising:
 - a water tub to contain water therein;
 - a rotary drum included in the water tub and rotating in alternating directions to hold laundry located in the rotary drum to be washed;
 - a pulsator rotatably mounted at a predetermined position on the rotary drum; and
 - a rotation guide unit to rotate the pulsator by a rotating force of the rotary drum.
2. The drum-type washing machine of claim 1, wherein the rotation guide unit comprising:
 - a ring gear mounted at a predetermined position on the water tub, and
 - a pinion engaging with the ring gear, and the pulsator comprising
 - a rotating plate rotating in the rotary drum; and
 - a rotating shaft to connect the rotating plate to the pinion of the rotation guide unit.
3. The drum-type washing machine of claim 2, further comprising a plurality of washing blades mounted to the rotating plate, the washing blades being projected toward an interior of the rotary drum.
4. The drum-type washing machine of claim 2, further comprising a seat formed at a predetermined position in the rotary drum to mount the pulsator in the rotary drum.
5. The drum-type washing machine of claim 4, further comprising a guide unit to guide the pulsator.
6. The drum-type washing machine of claim 5, wherein the guide unit comprising:
 - a guide part having a plate shape, and slidably contacting with the rotating plate of the pulsator;
 - a mounting part to mount the guide part to the seat;

a central hole formed at a center of the guide part to allow the rotating shaft to pass through the guide part; and

a shaft guide part extending from the central hole to guide the rotating shaft.

7. The drum-type washing machine of claim 6, further comprising a bushing at a predetermined position of the shaft guide part and slidably contacting with the rotating shaft.

8. The drum-type washing machine of claim 5, wherein the guide unit is integrated with the seat into a single structure.

9. A drum-type washing machine, comprising:
a water tub to contain water therein;
a rotary drum included in the water tub and rotating in alternating directions to hold laundry located in the rotary drum to be washed; and
a plurality of pulsators rotatably mounted at predetermined positions in the rotary drum to be spaced apart from a center of rotation of the rotary drum.

10. The drum-type washing machine according to claim 9, wherein the plurality of pulsators are arranged around the center of rotation of the rotary drum at regular angular intervals.

11. The drum-type washing machine of claim 3, wherein the plurality of washing blades are radially arranged on a front surface of the rotating plate.

12. The drum-type washing machine of claim 4, wherein the seat is a concavely depressed portion of a rear wall of the rotary drum.

13. The drum-type washing machine of claim 5, wherein the guide unit comprising:
a guide surface slidably contacting with the rotating plate and formed with a central hole to allow the rotating shaft to pass through the guide surface; and
a guide step forwardly projected from an edge of the guide surface to guide a sidewall of the rotating plate.

14. The drum-type washing machine of claim 13, further comprising a bushing positioned at an inner circumferential surface of the central hole and slidably contacting the rotating shaft.

15. The drum-type washing machine of claim 13, wherein the guide surface is a circular shape.

16. The drum-type washing machine of claim 2, wherein the rotating plate is formed to be forwardly convex at a central portion thereof.